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10/601,208

06/20/2003

Curtis A. Vock

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09/26/2006

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EXAMINER

WACHSMAN, HAL D

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,208

Applicant(s)

VOCK ET AL.

Examiner

Hal D. Wachsman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-12, 14-18 and 20-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-12, 14-18, 20-26 and 28-32 is/are rejected.
- 7) ☒ Claim(s) 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. The amended Abstract in the reply filed 7-17-06 is improper under 37 C.F.R. 1.121 because the Abstract was substantially rewritten, however a *new* abstract in clean text (no markings) accompanied by an instruction for the cancellation of the previous Abstract was not provided. In addition, the amended Abstract in the reply filed 7-17-06 is also objected to under 37 C.F.R. 1.72 because any new, or replacement, abstract must be submitted on a separate sheet. Appropriate correction is required.
2. Claims 13 and 19 in the listing of claims of the reply filed 7-17-06 are improper under 37 C.F.R. 1.121 because the status identifier is not in parentheses. Appropriate correction is required.
3. Claims 16-18, 20-26 and 31, are objected to under 37 C.F.R. 1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claim 16, lines 3-4 and 7, cite "the one or more sensors" however the antecedent basis is "one or more smart sensors". Claims 24, 25 and 31, each cite "the one or more sensors" however the antecedent basis is "one or more *smart* sensors". The examiner asks the applicant to better claim the limitations cited above. While the examiner understands the intentions of the applicant he feels confusion could be drawn from the limitations cited above. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 10-12, 15-18, 22-26, 28, 29, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw (6,563,417) in view of West (5,936,523).

As per claim 10, Shaw (see at least abstract) discloses "attaching one or more smart sensors directly to the product at the first location". Shaw (Abstract, figure 8, col. 3 lines 39-41, col. 4 lines 51-54, 61-66) discloses "monitoring at least one environmental condition of the product via the one or more smart sensors and during shipment". Shaw (Abstract, figure 8, col. 4 lines 54, 61-66) discloses "wirelessly communicating the environmental condition from the one or more smart sensors to a receiver at the second location". Shaw (figures 3, 8, col. 3 lines 22-28, col. 9 lines 6-26) discloses "communicating the environmental condition from the receiver to a third location". It appears though that Shaw does not clearly disclose "wherein the step of monitoring at least one environmental condition comprises detecting acceleration at at

least one of the one or more smart sensors". However, West (see at least abstract) teaches this excepted feature. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of West to the invention of Shaw as specified above because as taught by West (col. 3 lines 5-6) an environmental condition of excessive acceleration could be from the dropping of a package and thus damage from mishandling (see West col. 1, lines 29, 30) of fragile shipping contents could be detected.

As per claim 11, Shaw (figure 3, col. 9 lines 6-26) discloses the feature of this claim.

As per claim 12, Shaw (see at least abstract) discloses the feature of this claim.

As per claim 15, Shaw (Abstract, figure 2, col. 4 lines 66, 67, col. 5 lines 1-14, 48-55) discloses the feature of this claim.

As per claim 16, Shaw (Abstract, figures 3,8, col. 3 lines 22-28, 39-41, col. 4 lines 51-54, 61-66, col. 9 lines 6-26) discloses "one or more smart sensors for attachment to the product and an interrogating device...and wirelessly communicating data about the environmental condition...the interrogating device communicating the environmental condition over a network". It appears though that Shaw does not clearly disclose "wherein the one or more sensors comprise an accelerometer and the environmental condition comprises acceleration". However, West (see at least abstract) teaches this excepted feature. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of West to the

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invention of Shaw as specified above because as taught by West (col. 3 lines 5-6) an environmental condition of excessive acceleration could be from the dropping of a package and thus damage from mishandling (see West col. 1, lines 29, 30) of fragile shipping contents could be detected.

As per claim 17, Shaw (see at least figure 3) discloses the feature of this claim.

As per claim 18, Shaw (col. 5 lines 60-63) discloses the feature of this claim.

As per claim 22, West (Abstract, col. 10 lines 35-56) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of West to the invention of Shaw as specified above because as taught by West (col. 3 lines 5-6) an environmental condition of excessive acceleration could be from the dropping of a package and thus damage from mishandling (see West col. 1, lines 29, 30) of fragile shipping contents could be detected.

As per claim 23, Shaw (Abstract, figure 2, col. 4 lines 66, 67, col. 5 lines 1-14, 48-55) discloses the feature of this claim.

As per claim 24, Shaw (figure 2, col. 5 lines 6-9) discloses the feature of this claim.

As per claim 25, West (figures 1, 2, 4, 5) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of West to the invention of Shaw as

specified above because as taught by Shaw (col. 5 lines 6-26) time stamping of the gathered environmental data in which temperature limits were exceeded for example, could be used to determine exactly who was responsible for any damage or spoilage of the product.

As per claim 26, Shaw (col. 4 lines 5-15) discloses the feature of this claim.

As per claim 28, West (see at least abstract) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of West to the invention of Shaw as specified above because as taught by West (col. 3 lines 5-6) an environmental condition of excessive acceleration could be from the dropping of a package and thus damage from mishandling (see West col. 1, lines 29, 30) of fragile shipping contents could be detected.

As per claim 29, Shaw (figure 2, col. 5 lines 6-26) discloses the feature of this claim.

As per claim 31, Shaw (Abstract, col. 4 lines 48-62, col. 9 line 54) discloses the feature of this claim.

As per claim 32, Shaw (figures 3, 8, col. 9 lines 6-26) discloses the feature of this claim.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw (6,563,417) in view of West (5,936,523) as applied to claim 10 above, and further in view of Tennes et al. (4,745,564) and Thompson et al. (4,862,394).

As per claim 14, Tennes et al. (Abstract, col. 10 lines 19-32, 52-56) teaches *attaching at least one accelerometer to the product*. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Tennes et al. to the inventions of Shaw and West as specified above because as taught by Tennes et al. (col. 1 lines 41-44) the accelerations experienced could be related to the damages incurred. It appears though that the above combination of references still does not clearly show the detecting of free fall to determine a drop distance. However, Thompson et al. (see at least abstract) teaches this excepted feature. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Thompson et al. to the inventions of Shaw, West and Tennes et al. as specified above because as taught by Thompson et al. (col. 2 lines 3-6) it would enable the determination of free-fall drop heights experienced by packaged equipment during a shipment over an extended period of time.

7. Claims 20 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw (6,563,417) in view of West (5,936,523) as applied to claims 16 and 10 above, and further in view of Tennes et al. (4,745,564).

As per claim 20, Shaw (Abstract, figure 2, col. 4 lines 66, 67, col. 5 lines 1-14, 48-55) discloses the temperature environmental condition. It appears though that Shaw does not clearly show the impact environmental condition. However, Tennes et al. (see at least abstract) teach an impact detection apparatus. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the

techniques of Tennes et al. to the inventions of Shaw and West as specified above because as taught by Tennes et al. (col. 1 lines 41-44) the accelerations experienced could be related to the damages incurred.

As per claim 30, Tennes et al. (Abstract, col. 4 lines 33-36, col. 10 lines 19-32, 52-56) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Tennes et al. to the inventions of Shaw and West as specified above because as taught by Tennes et al. (col. 1 lines 41-44) the accelerations experienced could be related to the damages incurred.

8. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw (6,563,417) in view of West (5,936,523) as applied to claim 16 above, and further in view of Thompson et al. (4,862,394).

As per claim 21, Thompson et al. (see at least abstract) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Thompson et al. to the inventions of Shaw and West as specified above because as taught by Thompson et al. (col. 2 lines 3-6) it would enable the determination of free-fall drop heights experienced by packaged equipment during a shipment over an extended period of time.

9. Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Applicant's arguments filed 7-17-06 have been fully considered but they are not persuasive with respect to the claims rejected above. On page 9 of the reply, with respect to amended claim 10, the Applicant argues "West discloses disposition of packaging but does not – anywhere – disclose attaching an accelerometer to a product". However, with respect to the underlined above and claim 10, the Applicant is arguing an unclaimed merit or distinction. On page 9 of the reply, the Applicant argues with respect to Shaw that "Shaw discloses interrogation, monitoring and data exchange using RFID tags but does not – anywhere – disclose an accelerometer or sensing acceleration as an environmental condition." However, it was West and not Shaw that was used to teach the detecting of acceleration as an environmental condition. On page 9 of the reply, the Applicant cites "In fact, West teaches away from claim 10's feature of acceleration...for example by disclosing monitoring only the enclosure...". However, the Abstract of West clearly states:

"A compact, self-contained device for placing inside a package or other enclosure to detect unwanted disposition of its contents. The device includes a **sensor for detecting an environmental condition that indicates unwanted disposition of the contents of the package..... Environmental conditions indicative of unwanted disposition include....excessive acceleration** from dropping of the package..."

Thus, as clearly shown above, it is not just monitoring the enclosure but is clearly monitoring the contents and detecting the environmental condition of acceleration as one indicator of unwanted disposition of the contents and thus does *not* teach away as stated by the Applicant. On page 9 of the reply, the Applicant further states that West

teaches away from placement of a sensor on the product. However, as the Abstract of West clearly shows that the sensor *can be placed inside* a package or other enclosure which contains the contents (i.e. the product) it is clear to see that because it can be placed inside such an enclosure it can be placed on the product which is within the enclosure. With respect to the arguments concerning the motivation to combine the Shaw and West references, the motivation for the combination was provided in the 35 U.S.C. 103 rejection of claim 10 shown above and the motivation is found stated in the West reference. That given, the Applicant's request for evidence pursuant to MPEP 2144 is *not applicable* here because the Examiner did not rely on "common knowledge" and did not take official notice of facts not in the record in making the rejections under 35 U.S.C. 103 (see MPEP 2144.03).

On pages 9-10 of the reply, the Applicant argues with respect to claim 14 "...Shaw does not disclose acceleration or use an accelerometer; West does not disclose attaching an accelerometer directly to the product, as in claim 10, and neither does it disclose determining drop distance.....". However, the Shaw reference was not used to disclose acceleration and it was Tennes et al. that was used to teach the attaching of an accelerometer to the product and it was Thompson et al. that was used to teach the determining of drop distance as clearly shown in the 35 U.S.C. 103 rejection of claim 14. On page 10 of the reply with respect to the Tennes reference the Applicant states "Tennes discloses acceleration, and that acceleration is in three axes". However, with respect to the underlined above, the Applicant is arguing an unclaimed merit or distinction. With respect to claim 14 the Applicant further states "The Examiner appears

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to have found features in various patents – in violation of hindsight – in an effort to render claim 14....”. However with respect to hindsight the Examiner respectfully notes the following:

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

With respect to the asking of proof per MPEP 2144 on page 10 with respect to the combination of Tennes and Shaw, the motivation was stated in the Tennes reference and therefore as already explained above MPEP 2144.03 is not applicable here. On page 11 of the reply, with respect to claim 30, the Applicant states that “Again, Shaw and West do not disclose multiple sensors attached directly to the product such that different parts of the product may be directly monitored, for example” however it was the Tennes et al. reference that was used to teach the feature of this claim. On page 11 of the reply, the Applicant argues that “Tennes discloses acceleration, and that acceleration is in three axes”. However, with respect to the underlined above, the Applicant is arguing an unclaimed merit or distinction. With respect to the asking of proof per MPEP 2144 on page 11 of the reply, the motivation for the combination of

references was found in the Tennes et al. reference as shown in the 35 U.S.C. 103 rejection above.

On page 11 of the reply, with respect to claim 31, the Applicant states "Shaw disclosure of "mounting" an RFID tag cannot be read to include "sticking" onto a product as in claim 31 without impermissible hindsight." However, the Examiner respectfully notes that one definition of sticking is "To put, thrust, or poke into a specified place or position" (see reference cited on PTO – 892 form). Thus, the "mounting" of an RFID tag to a product would be the putting of the RFID tag in a specified place, in this case the product being the specified place. Therefore, the Examiner respectfully disagrees.

On page 12 of the reply, with respect to claim 16, the Applicant states that "As argued above, Shaw and West fail to teach attachment to the product with an accelerometer. They also lack motivation to combine or suggest this feature." However, this was already addressed above in the reply to arguments concerning claim 10. The Applicant further argues on page 12, that "For example, claim 20 requires that the environmental condition include both of impact and temperature, a feature absent from both Shaw and West." However, with respect to claim 20, it was the Tennes et al. reference that was used to teach the environmental condition comprising impact. Also, the Examiner respectfully notes that a new claim 32 was added in the reply however no arguments were presented to point out the specific distinction(s) believed to render newly presented claim 32 patentable over the applied references (37 C.F.R. 1.111(b)).

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D. Wachsman whose telephone number is 571-272-2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Hal D Wachsman
Primary Examiner
Art Unit 2857

HW
September 20, 2006